work is needed before assessing the value of plasma transfusions for maintaining the level of the proteins in the plasma of children who are ill for a long time, but our findings suggest that they might be useful. It must be remembered that the salt content of plasma is approximately equivalent to that of normal saline." 10 references.

J. C. M. C.

THOMPSON, S. A., AND BIRNBAUM, C. L.: *The Phenomenon of Asphyxial Resuscitation. I. Resuscitation with Inert (Asphyxiating) Gas in Advanced Asphyxia.* Surg., Gynec. & Obst. 74: 1078–1083 (June) 1942.

"Resuscitation in asphyxia is of considerable and mutual interest to physiology and medicine. From the practical standpoint, the problem is important in the operating room—cessation of respiration and of circulation or both—, in industrial surgery—electric shock, cave-in, gases and fumes—, in civilian life—carbon monoxide asphyxia, drowning—, and military surgery—crushing injuries, air raid casualties, war gas poisoning, thoracic trauma. Yet, much controversy still exists on methods of resuscitation. For this reason, we have carried out an experimental investigation in an attempt to clarify this important problem. During this work we observed a phenomenon, to our knowledge hitherto not described, which bears directly on the practical aspects of resuscitation. . . .

"Advanced asphyxia was produced experimentally by tracheal obstruction or inhalation of inert gases—nitrogen, helium. When in such asphyxia the respiration has ceased, it is possible to resuscitate with a suck and blow apparatus, inert gas being used. Such resuscitation is possible in a high percentage of cases and far beyond the period at which spontaneous recovery could occur by discontinuing the asphyxial procedure. With other methods of resuscitation—manual artificial respiration, rhythmic inflation, rhythmic suction—recovery of the circulation and respiration is the exception rather than the rule. In this phenomenon of asphyxial resuscitation, the heart and circulation recover first, the respiration later. Typically applied in experimental asphyxia, the positive-negative resuscitator, with inert gas, is kept in action until the blood pressure has definitely recovered and spontaneous respiration is taken, when the lungs are let in communication with the atmospheric air. In many instances recovery is also possible by discontinuing the resuscitator after the blood pressure has recovered but before spontaneous respiration has occurred." 3 references.

J. C. M. C.

ALTSCHULE, M. D.; GILLIGAN, D. R., AND ZAMCHECK, N.: *The Effects on the Cardiovascular System of Fluids Administered Intravenously in Man. IV. The Lung Volume and Pulmonary Dynamics.* J. Clin. Investigation 21: 365–368 (May) 1942.

"Studies of the effect of the injection of fluids intravenously on the subdivisions of the lung volume and on the respiratory dynamics have been made in six normal subjects. Injection intravenously of 1800 cc. of isotonic sodium chloride solution, at rates of 39 to 185 cc. per minute, in these normal subjects caused no change in residual air, and only slight decreases in the vital capacity, its components, the reserve and complemental airs, and in the total lung volume. The respiratory minute volume showed no consistent change, although the tidal air was usually decreased. All the changes in pulmonary function found after intravenous infusions in these normal subjects were insignificant. The slight decreases in vital capacity, its components, and the total lung volume, after these massive intravenous